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TRIPLE DIODE—HIGH-MU TRIODE

9-PIN MINIATURE TYPE

With heater having controlled warm-up time

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage	6.3	ac or dc volts
Current	0.45 ± 6%	amp
Warm-up time (Average)	11	sec

For definition of heater warm-up time and method of determining it, see sheet HEATER WARM-UP TIME MEASUREMENT at front of this Section.

Direct Interelectrode Capacitances:

	Without External Shield	*With External Shield**	
Triode Unit:			
Grid to plate	1.7	1.7	μμf
Grid to cathode & internal shield (pin 7), and heater	1.6	1.7	μμf
Plate to cathode & internal shield (pin 7), and heater	1.2	2.4	μμf
Diode Units:			
Diode-No.1 plate to cathode & internal shield (pin 7), and heater	3.8	3.8	μμf
Diode-No.2 plate to cathode & internal shield (pin 3), and heater	3.8	3.8●	μμf
Diode-No.3 plate to cathode & internal shield (pin 7), and heater	3.4	3.6	μμf
Diode-No.2 cathode & internal shield (pin 3) to all other electrodes, and heater	7.5	8.5■	μμf
Triode grid to any diode plate	0.034 max.	0.034 max.	μμf

Characteristics, Class A_1 Amplifier (Triode Unit):

Plate Voltage	100	250	volts
Grid Voltage	−1	−3	volts
Amplification Factor	70	70	
Plate Resistance (Approx.)	54000	58000	ohms
Transconductance	1300	1200	μmhos
Plate Current	0.8	1	ma

Mechanical:

Operating Position	Any
Maximum Overall Length	2-3/16"

*,●,■: See next page.

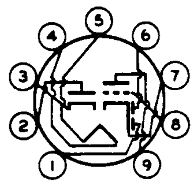
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Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	*See General Section*
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW	9E

Pin 1 - Diode-No.3 Plate
Pin 2 - Diode-No.2 Plate
Pin 3 - Diode-No.2 Cathode, Internal Shield
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Diode-No.1 Plate
Pin 7 - Cathode of Triode & Diodes No.1 & No.3, Internal Shield
Pin 8 - Triode Grid
Pin 9 - Triode Plate

TRIODE UNIT — AMPLIFIER — Class A_1

Maximum Ratings, *Design-Maximum Values.*

PLATE VOLTAGE	330	max.	volts
GRID VOLTAGE:			
Positive-bias value	0	max.	volts
PLATE DISSIPATION	1.1	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	100	max.	volts
Heater positive with respect to cathode	100	max.	volts

Typical Operation as Resistance-Coupled Amplifier:

See RESISTANCE-COUPLED AMPLIFIER CHART No.7 at front of this Section

DIODE UNITS — Three

Maximum Ratings, *Design-Maximum Values:*

PLATE CURRENT (For each diode)	5.5	max.	ma
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	100	max.	volts
Heater positive with respect to cathode	100	max.	volts

Characteristics (Each Unit):

Plate Voltage	5	volts
Plate Current	20	ma

Diode Considerations:

Diode No.1, diode No.3, and the triode have a common cathode, and diode No.2 has a separate cathode. Diode No.2 (pins 2 & 3) and diode No.3 (pins 1 & 7) are recommended for use in FM detector applications, while diode No.1 (pins 6 & 7) is recommended for use as an AM detector.

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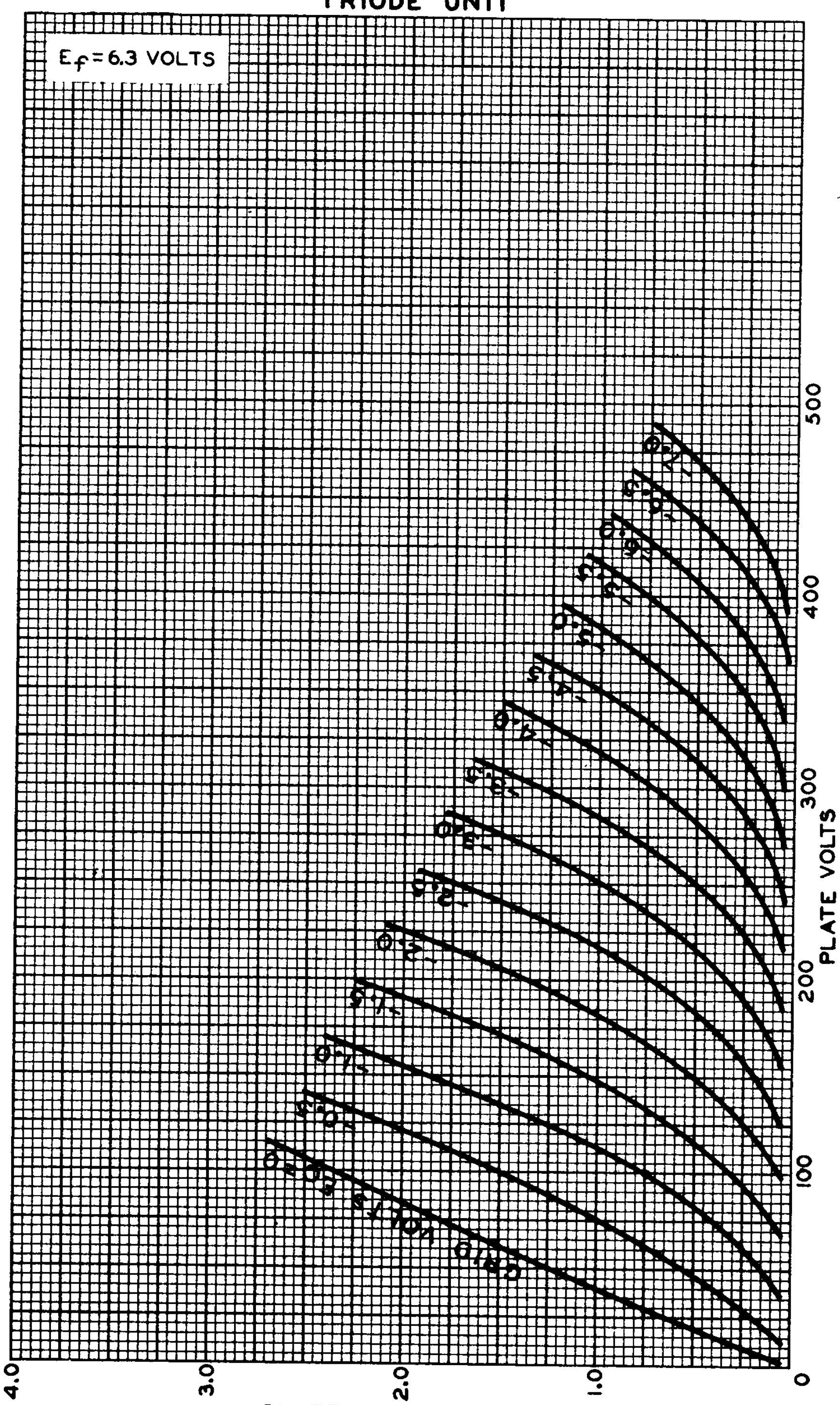
TRIPLE DIODE—HIGH-MU TRIODE

* With external shield JEDEC No.315 connected to pin 7 except as noted.
● With external shield JEDEC No.315 connected to pin 3.
■ With external shield JEDEC No.315 connected to pins 4 and 5.

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AVERAGE PLATE CHARACTERISTICS
TRIODE UNIT



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92CM-7063

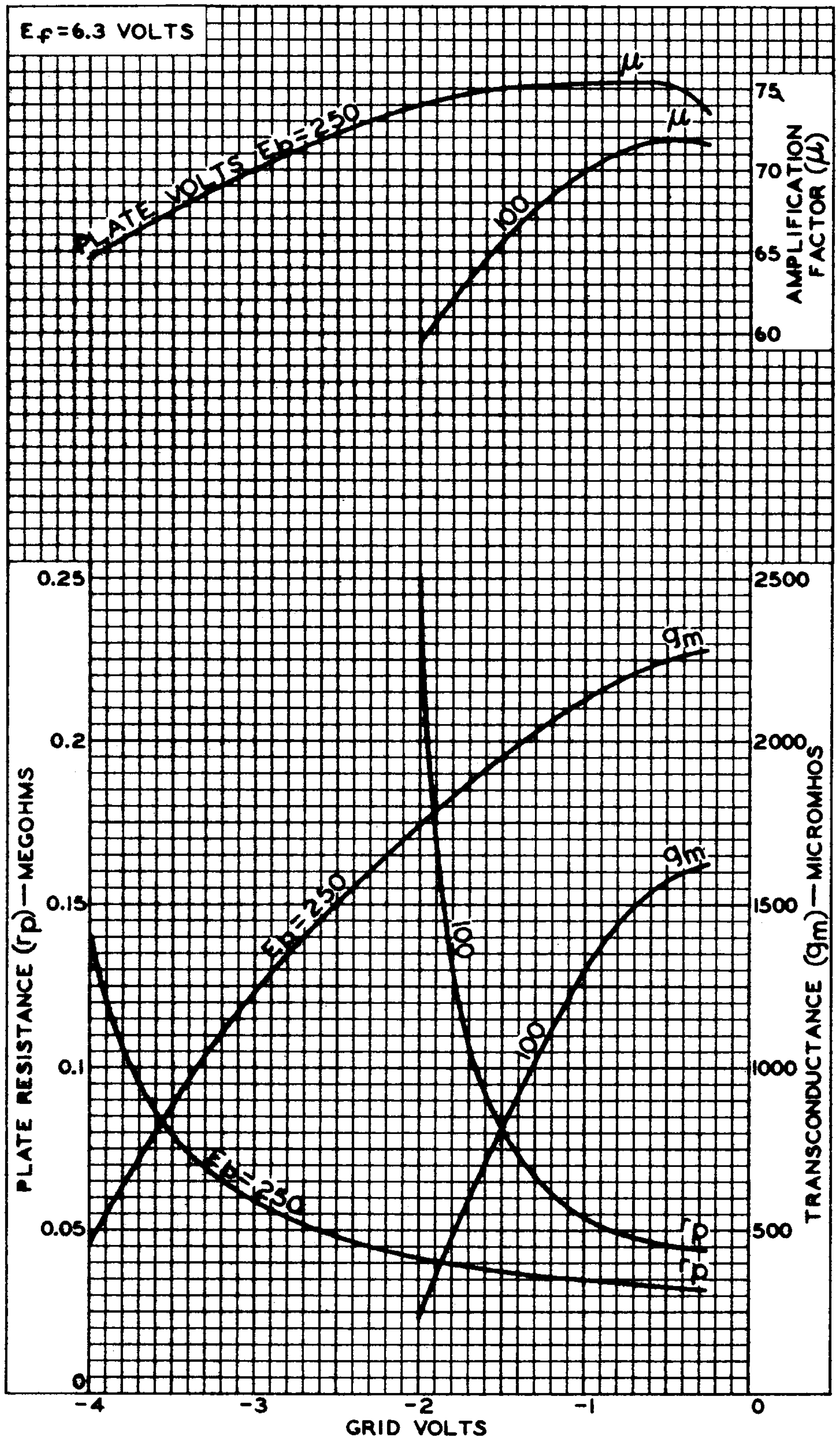
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AVERAGE CHARACTERISTICS

TRIODE UNIT



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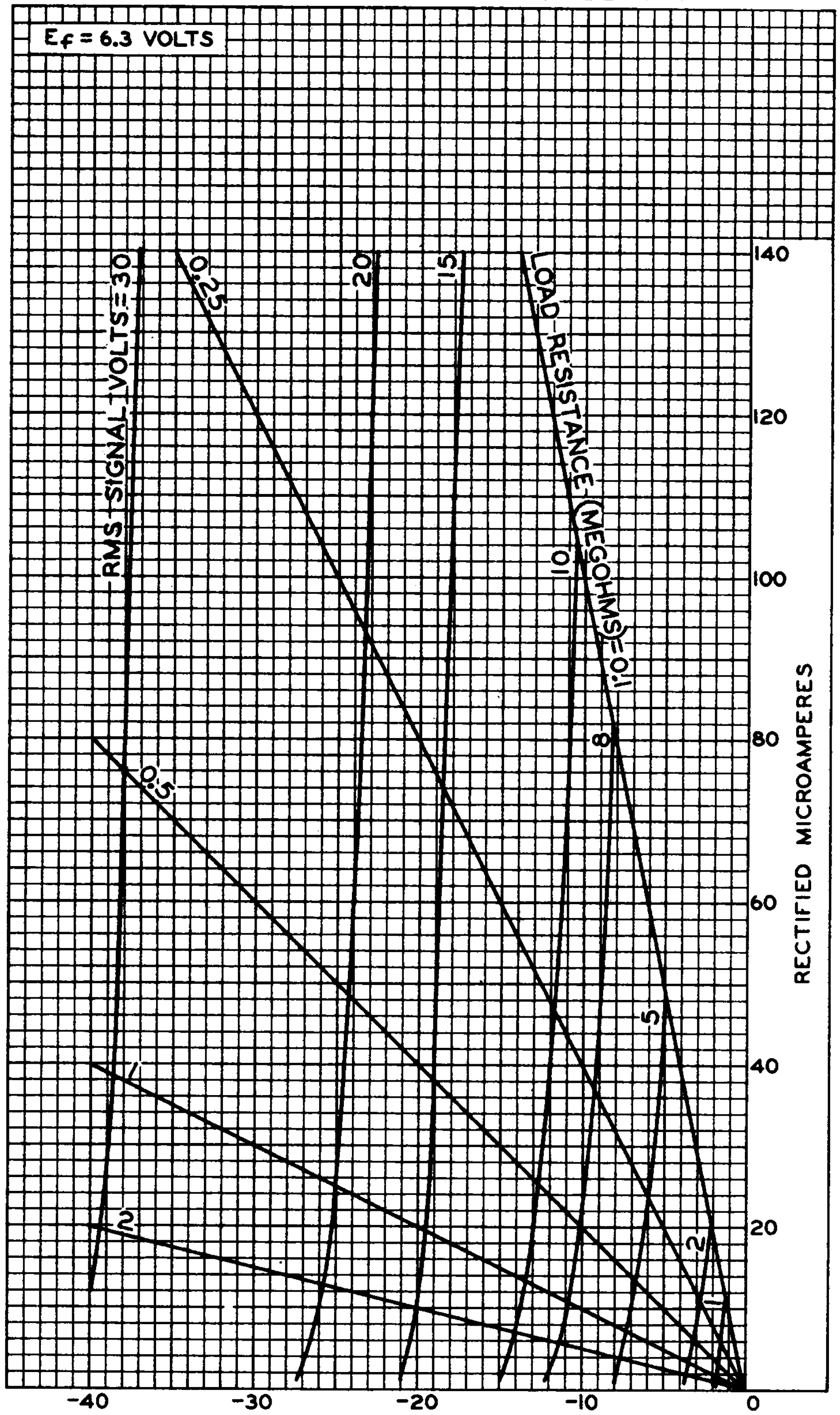
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AVERAGE CHARACTERISTICS

HALF-WAVE CIRCUIT—EACH DIODE UNIT



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